

**Hearing on the S. 414 and the Digital Divide**

**Senate Subcommittee on Science, Technology and Space**

**Written Testimony**

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Good afternoon, Mr. Chairman and members of the Subcommittee on Science, Technology and Space of the Senate Committee on Commerce, Science, and Transportation.

I am Juliet García, President of the University of Texas-Brownsville. I am pleased to testify today at this hearing on the Digital Divide, its effect on Minority-serving Institutions and the Digital Network Technology Program Act.

Let me begin by describing our University. In partnership with Texas Southmost College, our University serves over 10,000 students at its campus located in Brownsville, one block from Mexico. We offer a wide range of courses from certificate, associate, baccalaureate, and graduate degrees as well as a growing workforce training and continuing education program. Our mission at UTB/TSC is to provide accessible and affordable postsecondary education of high quality, to conduct research which expands knowledge and to present programs of continuing education, public service, and cultural value to meet the needs of the community. The partnership between the University and Texas Southmost College combines the strengths of the community college and those of an upper-level university by increasing student access and eliminating inter-institutional barriers while fulfilling the distinctive responsibilities of each type of institution.

At UTB/TSC, we place excellence in learning and teaching at the core of our commitments. We seek to help students at all levels develop the skills of critical thinking, quantitative analysis, effective communications, and technology that will sustain lifelong learning. On a daily basis, we serve students who are in great need of remedial work in core areas and students who are promising research scientists with bilingual abilities.

UTB/TSC fosters an appreciation of the unique heritage of the Lower Rio Grande Valley, and provides academic leadership to the intellectual, cultural, social and economic life of the bi-national urban region it serves. That region is over 90% Hispanic with an annual median family income of about \$15,000 and an unemployment rate that approaches twice the national average.

When I see in the National Telecommunications and Information Administration's report that the Internet divide for Hispanic households was 4.3% wider in 2000 than in 1998, I know that the Brownsville Community also faces this increasing divide.

The library at UTB/TSC, in terms of books available per student, ranks among the bottom 10% of the colleges in the state of Texas. This means that at the University of Texas at Austin there are 146 books per student as compared to 17 books per student at UTB/TSC. Digital access is a great leveler. We have begun to create and make available to our students a digital library. Our director of library services says that what would take a decade to build in a traditional print library can be done in two years with online access. Collections that at one time were available only to the wealthy schools are now available to smaller institutions through the Internet.

These examples are provided because what is true for UTB/TSC students is reflective of our region.

At UTB/TSC, we are fully aware of the singular importance of the Digital Divide and its far reaching effects on low-income and minority youth. We also fully embrace the imperative of better integrating technology into the classroom, curriculum, school administration, and community to improve student achievement through the development of 21<sup>st</sup> century skills.

And, we understand that one of the most effective ways to foster integration of technology into education at all levels is through well-designed partnerships that cut across the divisions that too often separate K-12 schools from colleges and universities and too often disconnect government from its community and its citizens.

In today's knowledge-based society and economy, students require 21<sup>st</sup> century skills.

More than ever before, today's students must be able to find, analyze, synthesize, and apply information quickly and efficiently. In conjunction with the development of strong reading, writing, and mathematical skills, better integration of technology into the classroom can improve both teaching and learning, making both more student-centered and productive. Anyone who has witnessed, in the classroom setting, the introduction of low-income and minority students to the personal computer and wonders of the Internet can attest to how such an experience can instantaneously propel their interest, motivation, critical thinking, and expression. As a nation, our goal surely ought to be to make that mind-expanding experience available to all students as early in their educational development as possible.

Access to technology in education—and all the benefits that flow from it—cannot be left to depend on one's income or race. It must be guaranteed for all youth.

To fully integrate technology into our educational system and reap the benefits of enhanced student achievement and development of 21<sup>st</sup> century skills, requires a broad approach that encourages all of the key players—administrators, parents, community, and government—to integrate technology into the way we do business. Only when school administrators use technology to manage education efficiently, only when parents are informed about technology and are fully supportive of its key role in the education of their children, and only when the entire community becomes fully involved through creative partnerships that foster the development and sharing of technology resources can the benefits of technology to students in the classroom be maximized and made available to all students, regardless of income or race.

Let me give you a recent example, in late January and early February, we had more than 10,000 fifth through eighth grade students come to our campus to participate in the live interactive viewing of scientists at work in Alaska through the JASON PROJECT, a science based program started by Dr. Robert Ballard. Our students used the Internet to submit questions to the Alaska and to complete answers to questions submitted by the scientists. One of our own students from San Benito High School, served as host with Dr. Ballard. This young lady, Christian Gonzalez, from the Lower Rio

Grande Valley who had never even seen real snow, who had never even imagined being on a live telecast, much less being in Alaska with a world renowned scientist, had a tremendous experience because technology had been used to introduce her to the possibilities in junior high school through the JASON project.

As a nation, our goal surely ought to be to make that kind of mind-expanding experience available to all students as early in their educational development as possible. Access to technology in education—and all the benefits that flow from it—cannot be left to depend on one's income or race or happenstance of where there were born and reared. It must be guaranteed for all youth.

In that regard, I applaud S. 414 for taking a broad approach to fostering integration of technology in education through creation of a flexible digital technology program. Under the proposed program, a wide range of colleges and universities that serve low-income black, Hispanic, and native American students can apply for a grant, contract or cooperative agreement to support a wide range of activities that can be designed to address the specific needs of their constituency, including:

- teaching students and teachers about technology in the classroom;
- creating and providing faculty development programs and prepare students or faculty seeking a degree or certificate;
- providing teacher education, library and media specialist training, and preschool and teacher aid certification to enhance technology skills in the classroom or the instructional process;
- implementing a joint project to provide technology education in the classroom; and
- providing leadership development to administrators, board members, and faculty.

Each of these activities is a critical piece of a broad, comprehensive strategy to fully integrate technology into education and ensure that access to such education is ensured for all low-income, minority students.

I would also like to applaud the flexibility of the proposed grants—permitting as they would a breadth of capacity building expenditures: on acquisition of equipment, instrumentation, networking capability, hardware and software, digital network technology, and infrastructure.

Finally, I applaud the bill's encouragement of the formation of partnerships between colleges and universities and state and local education agencies, community-based organizations, national non-profit organizations, and businesses, including minority businesses. The Advisory Committee on Student Financial Assistance, a congressional chartered panel on which I serve as Chairperson, has recommended the expansion of partnerships to ensure that low-income students who currently cannot afford college have access to high quality higher education and a baccalaureate degree.

UTB/TSC has broad experience with partnerships and we have witnessed first-hand the power of such partnerships. Our GEAR UP grant from the U.S. Department of Education has enabled us to partner with local schools to ensure that students learn about the possibility of higher education as early as middle school and graduate from high school academically prepared to enroll in college. Over 7,000 Brownsville area students are participating in the GEAR UP program. In addition, a foundation grant has enabled us to create the ENLACE program in which we partner with schools and community groups to enhance the teaching of science and support community activities that help students and parents understand and enjoy science.

I believe the proposed program, supporting varied and far-reaching activities through partnerships would help minority-serving institutions make great progress in closing the Digital Divide for the benefit of the students they serve as well as the entire nation.